

Remarks

This amendment is in response to the Office Action of June 3, 2004. In the Office Action, the Examiner rejected claims 1-3 and 7-10 and 15, and allowed claims 5, 6 and 11-14.

The Examiner first rejected claims 2-5 under 35 USC §112 as being indefinite. Applicant has amended claim 2 above which should overcome this rejection.

The Examiner next rejected claims 1-3 under 35 USC §103(a) as being unpatentable over *Esau* '494 in view of *Smith* '936. The applicant has amended claim 1.

According to the invention, the front, back, and coupler links are displaceable so that the upper end of the back link is movable toward and away from the lower end of the front link, between positions on opposite sides of a line drawn from the lower end of the back link to the first end of the coupler link. This relationship is demonstrated by the marked-up Figures 2 and 3 (previously submitted) which show the claim-defined line and the relative position of the upper end of the back link marked "A". In Figure 2 the upper end "A" is on the left side of the claim-defined line and in Figure 3 it is on the right side.

Such a configuration is missing in *Esau* '494 and *Smith*. In *Esau* '494, as demonstrated on the marked-up Figures 2 and 3 (previously submitted) from the patent, the upper end "A" of the back rocker link always remains on the right side of the corresponding claim-defined line.

Applicant asserts that the rejection of claim 1 has been overcome and

requests withdrawal of the rejection of claim 1 and all claims dependent thereon.

The Examiner next rejected claim 7 under 35 USC §103 (a) as being unpatentable over *Esau* '494 in view of *Smith* '936 and further in view of *Kurtz, Jr. et al.* '846 and rejected claim 8 under 35 USC §103(a) as being unpatentable over *Esau* '494 in view of *Smith* '936, *Kurtz, Jr. et al.* '846 and further in view of *Schroeder et al.* '490. Applicant has cancelled claim 8 without prejudice and amended claim 7.

Amended claim 7 describes the hood-mounted bracket comprising a metal base portion extending across the width of the polymeric hood, wherein the one link is fixed at one end of said base portion, wherein the base portion of the hood-mounted bracket is composed of steel and is secured adhesively to the underside of the polymeric hood.

Kurtz, Jr. et al. '846 teaches away from the present invention. Particularly, *Kurtz, Jr. et al.* '846 teaches that the hood is manufactured preferably from a polymer such as fiberglass reinforced polyester by a process called liquid composite molding. The hinge casting is described as preferably constructed of aluminum so that the thermal expansion of the hinge casting is similar that of the polymer hood. Importantly, it is stated that the hinge casting is bonded to the underside of the hood with high tech, heat cured adhesive to form a permanent bond with the hood (column 5, line 63--column 6, line 23). Heat cured adhesives form brittle bonds. Therefore, according to *Kurtz, Jr. et al.* '846, the thermal expansion of the hood material and the hinge material must be similar, to prevent cracking and separation. A tractor hood and hinge bracket can be subjected to

widely varying temperatures, considering the heat generated by the engine beneath the hood and the outside ambient temperature.

According to the present invention, and in contrast to the teaching of *Kurtz, Jr. et al.* '846, a steel hinge bracket can be adhesively secured to a polymer hood, despite the significantly different coefficients of thermal expansion, because of the particular adhesive used. As set forth in the disclosure, a heat curable adhesive is not used. Particularly, as stated in the disclosure at page 4, second paragraph, the bracket is secured to the underside of the hood by a 3M adhesive tape, which is not a heat cured adhesive. The adhesive tape forms a flexible bond. According to the present invention, the necessity for matching the thermal expansion of the hood to the bracket is obviated.

Schroeder et al. '490 is directed to an automobile construction. This reference describes a plastic body that is bolted, and also secured with adhesive, to a steel frame (column 2, lines 29-31). The "anti-peeling" bolts are an important part of the total attaching system (column 6, lines 24-36). *Schroeder et al.* '490 teaches that an adhesive attaching of the automobile body should be supplemented with "anti-peeling" bolts. It is not a teaching that adhesive attaching can *replace* bolting for a high stress connection such as a hood hinge connection. *Schroeder et al.* '490 does not discuss differential expansion regarding hoods. The present invention provides the securing of a metal transverse hinge bracket to a polymeric hood for the claimed configuration without the need for bolts which would detract from the smooth outer appearance on the hood.

None of the references *Esau* '494, *Smith* '936, *Schroeder et al.* '490 or *Kurtz, Jr. et al.* '846 disclose such a transverse base portion composed of steel that is adhesively secured to an underside of a hood.

Applicant asserts that the rejection of claim 7 has been overcome and requests withdrawal of the rejection of claim 7 and all claims dependent thereon.

The Examiner next rejected claim 9 under 35 USC §103 (a) as being unpatentable over *Kurtz, Jr. et al.* '846 in view of *Smith* '936, *Schroeder et al.* '490, and *Fleming* '759. Claim 9 describes a combination of a vacuum-formed polypropylene hood and a steel hinge bracket, the steel hinge bracket comprising a steel plate extending across a width of the hood and which is secured adhesively to the hood. The present invention provides the securing of a steel hinge to a polymeric hood without the need for bolts which would detract from the smooth outer appearance on the hood. None of the references *Kurtz, Jr. et al.* '846, *Smith* '936, *Schroeder et al.* '490, or *Fleming* '759 disclose such a transverse steel plate that is adhesively secured to an underside of a polymeric hood. According to the invention, a steel hinge bracket can be adhesively secured to a polypropylene hood, despite the significantly different coefficients of thermal expansion, because of the particular adhesive used.

Applicant asserts that the rejection of claim 9 has been overcome and requests withdrawal of the rejection of claim 9 and all claims dependent thereon.

The Examiner next rejected claim 10 under 35 USC §103(a) as being unpatentable over *Kurtz, Jr. et al.* '846 in view of *Smith* '936, *Schroeder et al.*

'490, *Fleming* '759 and further in view of *Esau* '494. However, based on the allowability of claim 9, this claim should also now be allowable.

The Examiner next rejected claim 15 as being unpatentable over *Esau* '494 in view of *Smith* '936 and further in view of *Schroeder et al.* '490. However, based on the allowability of claim 1, this claim should also now be allowable.

Examiner next indicated the claims 5, 6 and 11-14 were allowed. Applicant acknowledges this allowance with appreciation.

Applicants assert that all claims are now in condition for allowance.

Respectfully submitted,

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